WHAT IS CLAIMED IS:

1. A valve cover locking screw assembly for a reciprocating pump module block having a bore, a removable valve cover closing said bore, and a valve cover locking ring with internal threads surrounding said bore, which assembly comprises:

a valve cover locking screw having cylindrical walls with external threads, a closed top, and an open bottom; and

a plurality of threaded bolts engaging a plurality of threaded openings through said cylindrical walls of said locking screw so that said plurality of bolts forces said valve cover against said module block to create a fluid tight seal.

2. A valve cover locking screw assembly as set forth in Claim 1 including a circular gasket between said valve cover and said module block to assist in forming a fluid tight seal.

3. A valve cover locking screw assembly as set forth in Claim 1 wherein said bore in said module block includes a circular shoulder to receive said valve cover thereon.

4. A valve cover locking screw assembly as set forth in Claim 1 including an eye bolt extending from said valve cover to act as a handle for said cover.

5. A valve cover locking screw assembly as set forth in Claim 1 including a plurality of removable fasteners between said locking ring and said module block to secure said locking ring to said module block.

6. A valve cover locking screw assembly as set forth in Claim 1 wherein each of said threaded bolts and each threaded opening is parallel to an axis of said cylindrical walls of said locking screw.

7. A valve cover locking screw assembly as set forth in Claim 1 including a head extending from said closed top of said locking screw.

8. A valve cover locking screw assembly as set forth in Claim 1 wherein a diameter of said removable valve cover is slightly less than an inner diameter of said locking ring.

9. A valve cover locking screw assembly as set forth in Claim 1 wherein said locking screw retrofits with an existing valve cover and locking ring.

10. A method to secure and seal a valve cover to a module block for a reciprocating pump, which method comprises:

inserting a removable valve cover through a valve cover locking ring secured to said module block over a bore in said module block;

threading a valve cover locking screw having cylindrical walls with external threads, a closed top, and an open bottom, in to said locking ring so that internal threads on said locking ring mate with said external threads of said locking screw; and

threading a plurality of bolts through threaded openings in said cylindrical walls of said locking screw so that said bolts force said valve cover against said module block.

11. A method as set forth in Claim 10 wherein said step of inserting said valve cover includes using an eye bolt extending from said cover as a handle.

12. A method as set forth in Claim 10 including the additional step of inserting a circular gasket against said module before inserting said valve cover.

13. A method as set forth in Claim 10 wherein said step of threading said valve cover is accomplished by rotating a head extending from said top of said locking screw.

14. A method as set forth in Claim 1 wherein steps are performed in reverse order to remove said valve cover.